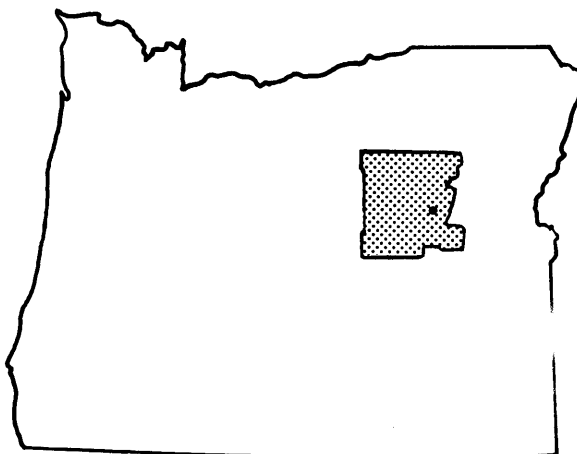


FLOOD INSURANCE STUDY



**CITY OF
PRAIRIE CITY,
OREGON
GRANT COUNTY**



FEBRUARY 17, 1988

Federal Emergency Management Agency

COMMUNITY NUMBER - 410082

NOTICE TO
FLOOD INSURANCE STUDY USERS

Communities participating in the National Flood Insurance Program have established repositories of flood hazard data for floodplain management and flood insurance purposes. This Flood Insurance Study may not contain all data available within the repository. It is advisable to contact the community repository for any additional data.

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FLOOD INSURANCE STUDY
CITY OF PRAIRIE CITY, GRANT COUNTY, OREGON

1.0 INTRODUCTION

1.1 Purpose of Study

This Flood Insurance Study investigates the existence and severity of flood hazards in the City of Prairie City, Grant County, Oregon, and aids in the administration of the National Flood Insurance Act of 1968 and the Flood Disaster Protection Act of 1973. This study has developed flood risk data for various areas of the community that will be used to establish actuarial flood insurance rates and assist the community in its efforts to promote sound floodplain management. Minimum floodplain management requirements for participation in the National Flood Insurance Program (NFIP) are set forth in the Code of Federal Regulations at 44 CFR, 60.3.

In some states or communities, floodplain management criteria or regulations may exist that are more restrictive or comprehensive than the minimum Federal requirements. In such cases, the more restrictive criteria take precedence and the State (or other jurisdictional agency) will be able to explain them.

1.2 Authority and Acknowledgments

The sources of authority for this Flood Insurance Study are the National Flood Insurance Act of 1968 and the Flood Disaster Protection Act of 1973.

The hydrologic and hydraulic analyses for this study were performed by the U.S. Army Corps of Engineers (COE), Walla Walla District, Walla Walla, Washington, for the Federal Emergency Management Agency (FEMA), under InterAgency Agreement No. IAA-EMW-E-1153, Project Order No. 1, Amendment No. 18. This study was completed in June 1985.

1.3 Coordination

Streams requiring detailed study were identified at a meeting attended by representatives of Prairie City, FEMA, and the study contractor in July 1983.

On April 9, 1987, the results of the study were reviewed at the final meeting attended by representatives of Prairie City, FEMA, and the study contractor. The study was acceptable to the community.

2.0 AREA STUDIED

2.1 Scope of Study

This Flood Insurance Study covers the incorporated areas of the City of Prairie City, Grant County, Oregon. The City of Prairie City is completely surrounded by Grant County. John Day River was studied from the downstream to the upstream corporate limits of Prairie City, and Dixie Creek was studied from its confluence with the John Day River to the upstream corporate limits. The area of study is shown on the Vicinity Map (Figure 1).

The areas studied by detailed methods were selected with priority given to all known flood hazard areas and areas of projected development or proposed construction through May 1990.

2.2 Community Description

Prairie City is located in the eastern part of Grant County in Central Oregon. The total land area contained within the corporate limits is 0.73 square miles. It is situated approximately 13 miles east of John Day, the largest city in Grant County. According to U.S. Census Bureau figures, the population increased from 842 in 1970 to 1106 in 1980 (Reference 1).

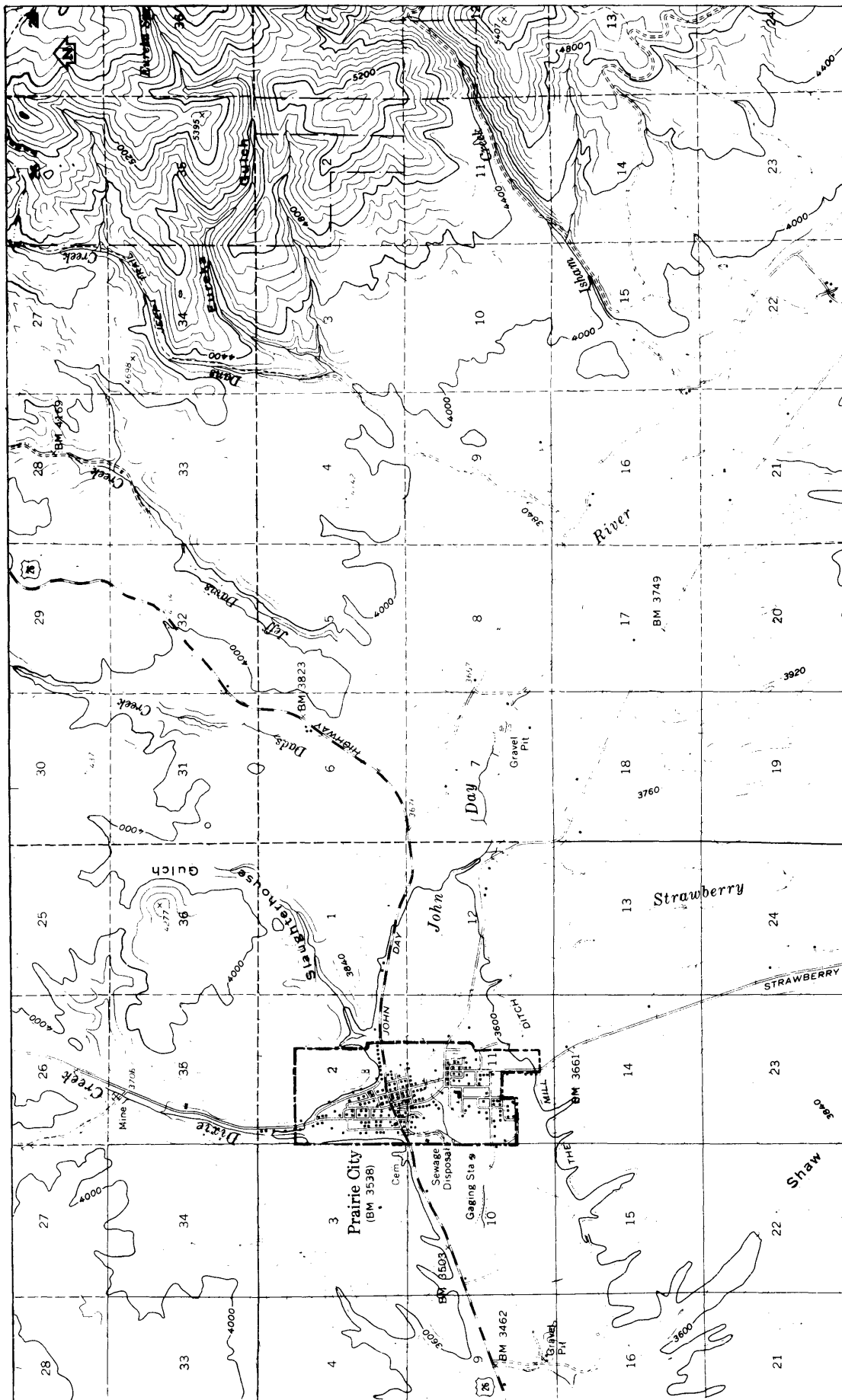
The John Day River flows through the city and is the largest stream in the county. Its length above Prairie City is 20.4 miles, and it flows out of the Blue Mountains south and east of Prairie City. The drainage area at the Prairie City western corporate limits is 231 square miles.

Dixie Creek, a tributary that flows in a southerly direction to the John Day River, is 11.3 miles long and has a drainage area of 31.1 square miles.

Approximately 35 percent of the city has been developed, with the remainder of land being vacant open fields. Within the floodplain studied, development is limited to single-family residences and private businesses. Development is on both sides of U.S. Highway 26, which is the only highway through Prairie City.

The climate at Prairie City is influenced by moderate prevailing westerly flows of maritime air from the Pacific Ocean. Occasional influxes of polar air masses will cause brief periods of extremely cold temperatures. Recorded extreme temperatures range from -31 degrees Fahrenheit to 112 degrees Fahrenheit at John Day (Reference 2).

The seasonal distribution of precipitation is similar to that observed over the interior of the Pacific Northwest, the greater portion falling during the winter months. The mean annual precipitation at Prairie City is 12.97 inches, with a mean annual snowfall of 47.3 inches (Reference 3).



APPROXIMATE SCALE



FEDERAL EMERGENCY MANAGEMENT AGENCY
CITY OF PRAIRIE CITY, OR
 (GRANT CO.)

VICINITY MAP

FIGURE 1

2.3 Principal Flood Problems

Streamflows in the upper John Day River Basin follow the pattern of a typical snowmelt stream with low flows occurring between July and February and high flows occurring from March through June. Annual peak flows, however, are distributed from December through June as a result of rainstorms, a combination of rain and snowmelt, or, in the case of some later season peaks, from snowmelt alone. Summer thunderstorms can cause severe flooding; however, this occurs in the small tributary basins of the John Day River.

Severe floods on the John Day River result from rainstorms combined with snowmelt. Annual peaks from snowmelt alone are usually not large enough to cause damage. The largest recorded flood on the John Day River occurred on December 22, 1964. The peak discharge on the John Day River at Prairie City was 2400 cubic feet per second (cfs) with an estimated 75-year recurrence interval. This flood was caused by a 3-day rain, frozen ground, and warm temperatures which melted most of the snow below 5000 feet in elevation. Another flood caused by conditions similar to the December 1964 flood occurred on January 30, 1965 with a peak discharge of 1840 cfs and an estimated recurrence interval of 30 years. The second largest flood on the John Day River at Prairie City occurred on March 25, 1952 and had a peak discharge of 2100 cfs and an estimated 45-year recurrence interval. This flood was the result of a scattered 2-day rain and warm temperatures, which melted much of the snow below the 5000 foot elevation.

Severe floods have occurred on Dixie Creek in the past; however, no records are available for winter and spring floods. On June 9, 1964, heavy thunderstorm activity passed Grant County, and one of the storm cells caused flooding on Dixie Creek. The estimated peak discharge was 910 cfs.

2.4 Flood Protection Measures

Other than minor channel maintenance, there are no designed flood protection measures, such as levees or control structures, existing along Dixie Creek and John Day River study reaches.

Nonstructural measures of flood protection are being used to aid in the prevention of future flood damage. These are in the form of land use regulations, adopted from the Code of Federal Regulations, which control building within areas that have a high risk of flooding (Reference 4).

3.0 ENGINEERING METHODS

For the flooding sources studied in detail in the community, standard hydrologic and hydraulic study methods were used to determine the flood hazard data required for this study. Flood events of a magnitude which are expected to be equaled or exceeded once on the average during any

10-, 50-, 100-, or 500-year period (recurrence interval) have been selected as having special significance for floodplain management and for flood insurance rates. These events, commonly termed the 10-, 50-, 100-, and 500-year floods, have a 10, 2, 1, and 0.2 percent chance, respectively, of being equaled or exceeded during any year. Although the recurrence interval represents the long term average period between floods of a specific magnitude, rare floods could occur at short intervals or even within the same year. The risk of experiencing a rare flood increases when periods greater than 1 year are considered. For example, the risk of having a flood which equals or exceeds the 100-year flood (1 percent chance of annual exceedence) in any 50-year period is approximately 40 percent (4 in 10), and for any 90-year period, the risk increases to approximately 60 percent (6 in 10). The analyses reported herein reflect flooding potentials based on conditions existing in the community at the time of completion of this study. Maps and flood elevations will be amended periodically to reflect future changes.

3.1 Hydrologic Analyses

Hydrologic analyses were carried out to establish peak discharge-frequency relationships for each flooding source studied in detail affecting the community.

Nine gaging stations in the John Day Basin were used to define the frequency-discharge relationships for John Day River and Dixie Creek at Prairie City. Record periods for the nine gaging stations are:

John Day River at McDonald Ferry	(Gage 14048000)	1905-83
John Day River at Service Creek	(Gage 14046500)	1914-15, 1921, 1930-83
NF John Day River near Monument	(Gage 14046000)	1925-83
MF John Day River near Ritter	(Gage 14044000)	1930-83
NF John Day River near Dale	(Gage 14041500)	1930-58
Camas Creek near Ukiah	(Gage 14042500)	1930-83
John Day River at Picture Gorge	(Gage 14040500)	1927-83
John Day River at Prairie City	(Gage 14038500)	1926-68
Strawberry Creek near Prairie City	(Gage 14037500)	1931-83

Values of the 10-, 50-, 100-, and 500-year peak discharges were obtained from a log-Pearson Type III distribution of annual peak flow data (Reference 5). The coefficients obtained for the gaged areas were correlated with basin parameters, and like coefficients were selected for the ungaged areas using the gaged area parameters (Reference 6).

To define frequency-discharge data for John Day River and Dixie Creek at Prairie City, the above method of analysis was used.

Peak discharge-drainage area relationships for John Day River and Dixie Creek are shown in Table 1.

TABLE 1. SUMMARY OF DISCHARGES

Flooding Source and Location	Drainage Area (square miles)	Peak Discharges (cubic feet per second)			
		10-Year	50-Year	100-Year	500-Year
John Day River 0.3 mile downstream from Dixie Creek confluence at Prairie City	231	1,330	2,200	2,600	3,900
John Day River Above Strawberry Creek Confluence	168	1,080	1,770	2,100	3,100
Dixie Creek At John Day River confluence at Prairie City	31	415	590	670	860

3.2 Hydraulic Analyses

Analyses of the hydraulic characteristics of flooding from the sources studied were carried out to provide estimates of the elevations of floods of the selected recurrence intervals.

Cross sections for backwater analysis of the streams in the study area were obtained from aerial photographs and field surveys. The below-water sections were obtained by field measurement. All bridges, dams, and culverts were field checked to obtain elevation data and structural geometry.

Channel roughness factors (Manning's "n") used in the hydraulic computations were chosen by engineering judgement and based on field observations of the streams and floodplain areas. The roughness value used for the main channel of the John Day River was .035 with a floodplain roughness value of 0.060 for all floods. The roughness value used for the main channel of Dixie Creek was 0.035 with floodplain roughness values of 0.045 to 0.060 for all floods.

Water-surface elevations of floods of the selected recurrence intervals were computed through use of the COE HEC-2 step-backwater computer program (Reference 7). Flood profiles were drawn showing computed water-surface elevations for floods of the selected recurrence intervals. Starting water-surface elevations used for the John Day River at Prairie City were previously computed at Section H for the Grant County Flood Insurance Study (Reference 8). The starting water-surface elevations for that study were calculated using the normal depth method. The starting water-surface elevations for Dixie Creek were also calculated using the normal depth method.

Dixie Creek downstream of Highway 26 required special hydraulic analyses because of inadequate channel capacities between the Highway 26 Bridge and a culvert crossing adjacent to the Prairie City Lumber Mill. Along this reach, considerable water flows from Dixie Creek's channel southwest through the mill area until emptying into the John Day River downstream of Dixie Creek. Flow magnitudes were determined using the HEC-2 Weir Option, assuming that the right (west) bank of Dixie Creek serves as an overflow weir along this reach. Due to this flow situation, a floodway was not computed on Dixie Creek downstream of Section F, located approximately 200 feet downstream of the Highway 26 Bridge. A floodway was computed using applicable equal conveyance reduction procedures starting at Section F and continuing upstream to the corporate limits of Prairie City.

Locations of selected cross sections used in the hydraulic analyses are shown on the Flood Profiles (Exhibit 1). For stream segments for which a floodway was computed (Section 4.2), selected cross section locations are also shown on the Flood Insurance Rate Map (Exhibit 2).

The hydraulic analyses for this study were based on unobstructed flow. The flood elevations shown on the profiles are thus considered valid only if hydraulic structures remain unobstructed, operate properly, and do not fail.

All elevations are referenced to the National Geodetic Vertical Datum (NGVD) of 1929. Elevation reference marks used in this study are shown on the maps; the descriptions of the marks are presented in Elevation Reference Marks (Exhibit 3).

4.0 FLOODPLAIN MANAGEMENT APPLICATIONS

The NFIP encourages state and local governments to adopt sound floodplain management programs. Therefore, each Flood Insurance Study provides 100-year flood elevations and delineations of the 100- and 500-year floodplain boundaries and 100-year floodway to assist communities in developing floodplain management measures.

4.1 Floodplain Boundaries

To provide a national standard without regional discrimination, the 1 percent annual chance (100-year) flood has been adopted by FEMA as the base flood for floodplain management purposes. The 0.2 percent annual chance (500-year) flood is employed to indicate additional areas of flood risk in the community. For each stream studied in detail, the 100- and 500-year floodplain boundaries have been delineated using the flood elevations determined at each cross section. Between cross sections, the boundaries were interpolated using topographic maps at a scale of 1:2,400, with a contour interval of 5 feet (Reference 9).

The 100- and 500-year floodplain boundaries are shown on the Flood Insurance Rate Map (Exhibit 2). On this map, the 100-year floodplain boundary corresponds to the boundary of the areas of special flood hazards (Zones A, AE, and AO); and the 500-year floodplain boundary corresponds to the boundary of areas of moderate flood hazards. In cases where the 100- and 500-year floodplain boundaries are close together, only the 100-year floodplain boundary has been shown. Small areas within the floodplain boundaries may lie above the flood elevations but cannot be shown due to limitations of the map scale and/or lack of detailed topographic data.

4.2 Floodways

Encroachment on floodplains, such as structures and fill, reduces flood-carrying capacity, increases flood heights and velocities, and increases flood hazards in areas beyond the encroachment itself. One aspect of floodplain management involves balancing the economic gain from floodplain development against the resulting increase in flood hazard. For purposes of the NFIP, a floodway is used as a tool to assist local communities in this aspect of floodplain management. Under this concept, the area of the 100-year floodplain is divided into a floodway and a floodway fringe. The floodway is the channel of a stream, plus any adjacent floodplain areas, that must be kept free of encroachment so that the 100-year flood can be carried without substantial increases in flood heights. Minimum Federal standards limit such increases to 1.0 foot, provided that hazardous velocities are not produced. The floodways in this study are presented to local agencies as minimum standards that can be adopted directly or that can be used as a basis for additional floodway studies.

The floodways presented in this study were computed for certain stream segments on the basis of equal conveyance reduction from each side of the floodplain. Floodway widths were computed at cross sections. Between cross sections, the floodway boundaries were interpolated. The results of the floodway computations are tabulated at selected cross sections (Table 2). In cases where the floodway and 100-year floodplain boundaries are either close together or collinear, only the floodway boundary has been shown.

The area between the floodway and 100-year floodplain boundaries is termed the floodway fringe. The floodway fringe encompasses the portion of the floodplain that could be completely obstructed without increasing the water-surface elevation of the 100-year flood more than 1.0 foot at any point. Typical relationships between the floodway and the floodway fringe and their significance to floodplain development are shown in Figure 2.

FLOODING SOURCE		FLOODWAY			BASE FLOOD WATER SURFACE ELEVATION			
CROSS SECTION	DISTANCE ¹	WIDTH ² (FEET)	SECTION AREA (SQUARE FEET)	MEAN VELOCITY (FEET PER SECOND)	REGULATORY FLOODWAY (FEET NGVD)	WITHOUT FLOODWAY (FEET NGVD)	WITH FLOODWAY (FEET NGVD)	INCREASE ³
Dixie Creek	1350	40	196	3.4	3532.2	3532.2	3533.2	1.0
F	1889	46	101	6.6	3537.0	3537.0	3537.1	0.1
G	2273	62	95	7.1	3541.8	3541.8	3541.8	0.0
H	2787	67	111	6.0	3548.4	3548.4	3548.4	0.0
I	3272	45	71	9.5	3555.7	3555.7	3556.1	0.4
J	3763	71	97	6.9	3562.8	3562.8	3562.8	0.0
K	4237	63	75	8.9	3571.2	3571.2	3571.2	0.0
L	4502	37	86	7.8	3574.0	3574.0	3574.1	0.1
M								

Note: Downstream of Section F the floodway was not computed. Along this reach a substantial amount of water (in excess of 50% of the 100-year flood) flows southwest through the lumber mill area until emptying into the John Day River.

¹ Distance in feet above centerline of confluence with John Day River. ² Maximum water-surface elevations (MAXWS), defined as being the greater of either (a) the computed water-surface elevation (CWSEL) or (b) the sum of the critical water-surface elevation and 0.4 X the mean velocity head (CRIWS + 0.4 X HV).

FEDERAL EMERGENCY MANAGEMENT AGENCY

CITY OF PRAIRIE CITY, OR
(GRANT COUNTY)

FLOODWAY DATA

DIXIE CREEK

TABLE 2

FLOODING SOURCE		FLOODWAY			BASE FLOOD WATER SURFACE ELEVATION			
CROSS SECTION	DISTANCE ¹	WIDTH ² (FEET)	SECTION AREA (SQUARE FEET)	MEAN VELOCITY (FEET PER SECOND)	REGULATORY	WITHOUT FLOODWAY (FEET NGVD)	WITH FLOODWAY	INCREASE ³
John Day River	600	108	280	9.3	3509.3	3509.3	3509.7	0.4
A	1,275	89	298	8.7	3513.8	3513.8	3514.0	0.2
B	2,038	70	300	8.7	3519.7	3519.7	3519.9	0.2
C	2,330	83	449	5.8	3522.9	3522.9	3522.9	0.0
D	2,612	77	321	6.5	3523.2	3523.2	3523.6	0.4
E	2,806	65	309	6.8	3525.2	3525.2	3525.2	0.0
F	4,068	113	416	5.1	3532.8	3532.8	3533.3	0.5
G								

¹ Distance in feet above Prairie City Corporate Limit. ² Maximum water-surface elevations (MAXWS), defined as being the greater of either (a) the computed water-surface elevation (CWSEL) or (b) the sum of the critical water-surface elevation and 0.4 X the mean velocity head (CRIWS + 0.4 X HV).

FEDERAL EMERGENCY MANAGEMENT AGENCY

CITY OF PRAIRIE CITY, OR
(GRANT COUNTY)

FLOODWAY DATA

JOHN DAY RIVER

TABLE 2

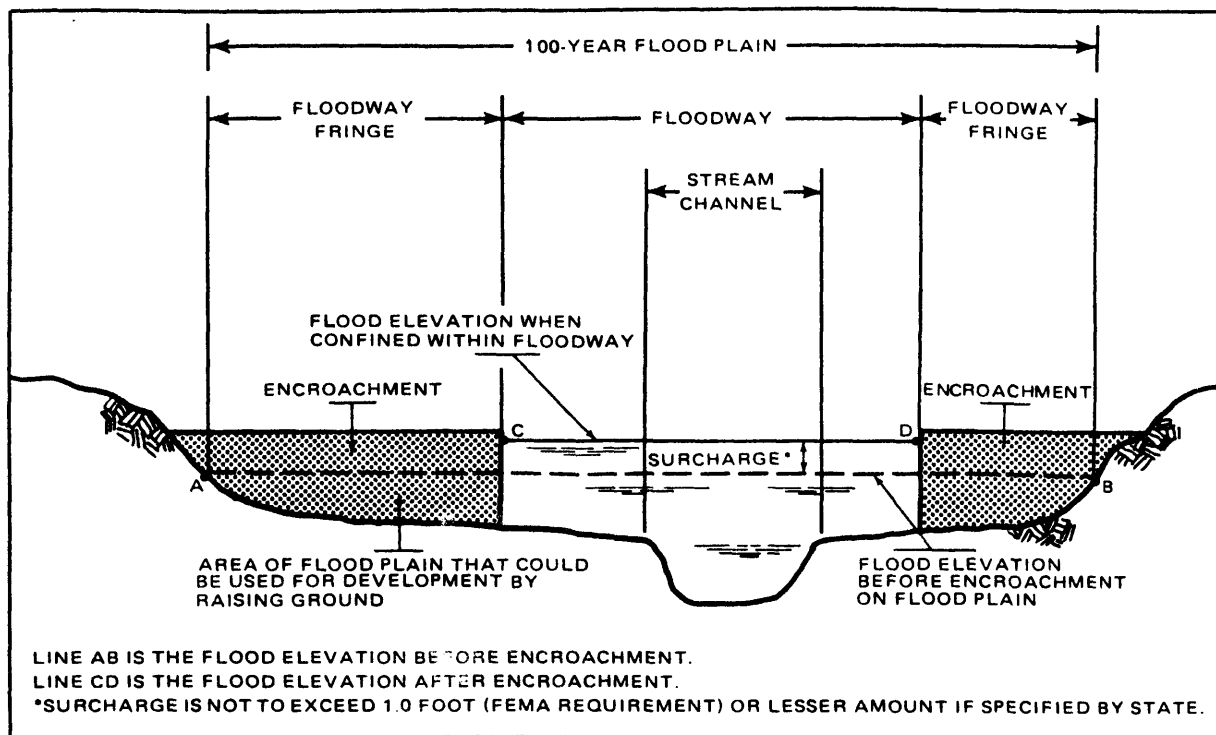


Figure 2. Floodway Schematic

5.0 INSURANCE APPLICATION

For flood insurance rating purposes, flood insurance zone designations are assigned to a community based on the results of the engineering analyses. These zones are as follows:

Zone A

Zone A is the flood insurance rate zone that corresponds to the 100-year floodplains that are determined in the Flood Insurance Study by approximate methods. Because detailed hydraulic analyses are not performed for such areas, no base flood elevations or depths are shown within this zone.

Zone AE

Zone AE is the flood insurance rate zone that corresponds to the 100-year floodplains that are determined in the Flood Insurance Study by detailed methods. Whole-foot base flood elevations derived from the detailed hydraulic analyses are shown at selected intervals within this zone.

Zone A0

Zone A0 is the flood insurance rate zone that corresponds to the areas of 100-year shallow flooding (usually sheet flow on sloping terrain) where average depths are between 1 and 3 feet. Average whole-foot depths derived from the detailed hydraulic analyses are shown within this zone.

Zone X

Zone X is the flood insurance rate zone that corresponds to areas outside the 500-year floodplain, areas within the 500-year floodplain, areas of 100-year flooding where average depths are less than 1 foot, areas of 100-year flooding where the contributing drainage area is less than 1 square mile, and areas protected from the 100-year flood by levees. No base flood elevations or depths are shown within this zone.

6.0 FLOOD INSURANCE RATE MAP

The Flood Insurance Rate Map is designed for flood insurance and floodplain management applications.

For flood insurance applications, the map designates flood insurance rate zones as described in Section 5.0 and, in the 100-year floodplains that were studied by detailed methods, shows selected whole-foot base flood elevations or average depths. Insurance agents use the zones and base flood elevations in conjunction with information on structures and their contents to assign premium rates for flood insurance policies.

For floodplain management applications, the map shows by tints, screens, and symbols the 100- and 500-year floodplains, floodways, and the locations of selected cross sections used in the hydraulic analyses and floodway computations.

7.0 OTHER STUDIES

A Flood Insurance Study has been completed for Grant County, Oregon (Reference 8). The profiles developed by this study for the John Day River match the Grant County study. However, due to the more detailed topographic mapping developed for Prairie City, the 100-year and 500-year boundaries do not match the existing boundaries in the Grant County study.

Due to its more detailed analysis, this Flood Insurance Study supersedes the previously printed Flood Hazard Boundary Map for Prairie City (Reference 10).

8.0 LOCATION OF DATA

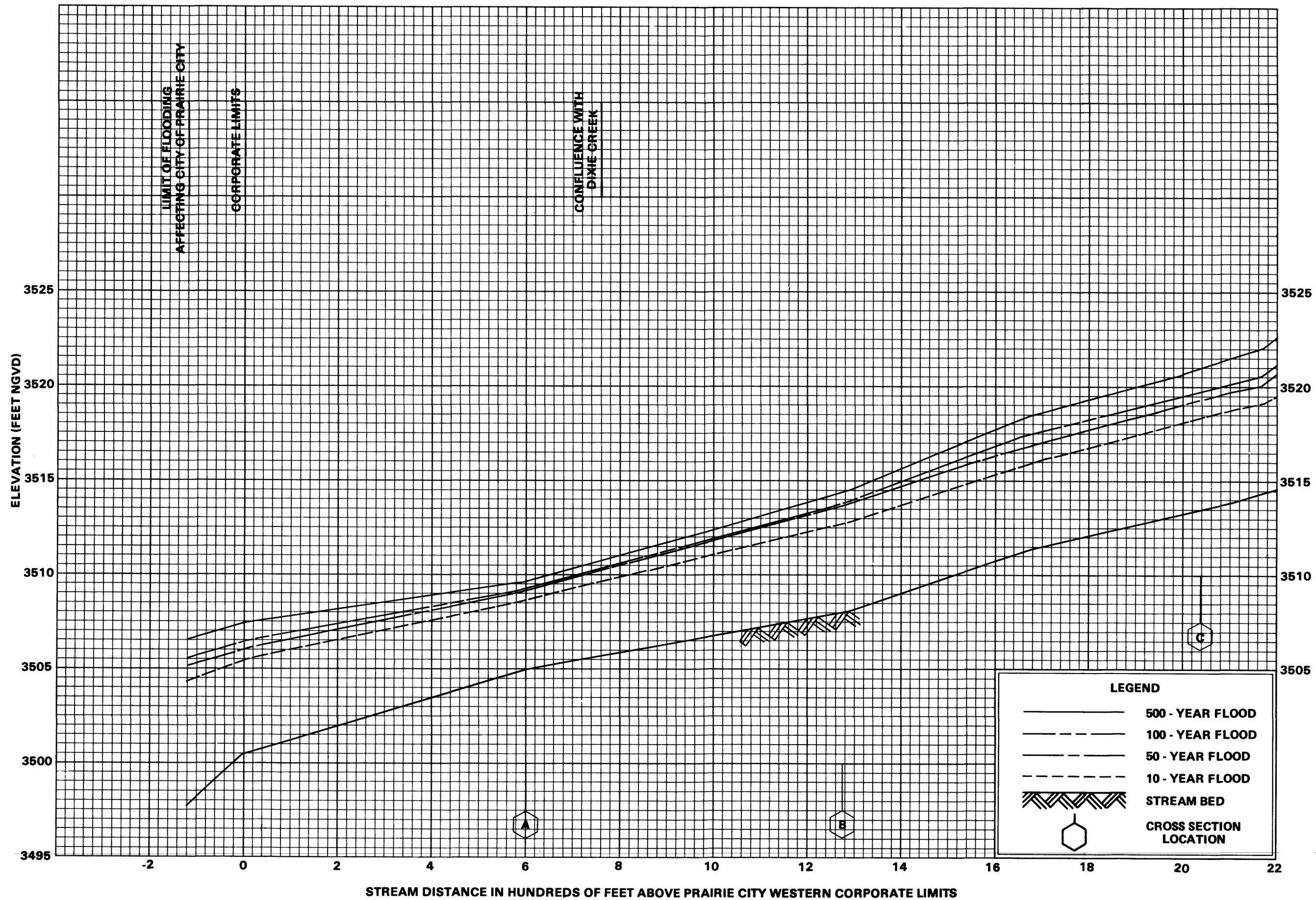
Information concerning the pertinent data used in the preparation of this study can be obtained by contacting the Natural and Technological Hazards Division, FEMA, Federal Regional Center, 130 228th Street, S.W., Bothell, Washington 98021-9796.

9.0 BIBLIOGRAPHY AND REFERENCES

1. U.S. Department of Commerce, Bureau of the Census, 1980 Census of Population Inhabitants, Oregon, Washington, D.C., 1981.
2. Pacific Northwest River Basins Commission, Meteorology Committee, Climatological Handbook Columbia Basin States, Temperature, Vol. 1, Part A, June 1969.
3. Pacific Northwest River Basins Commission, Meteorology Committee, Climatological Handbook Columbia Basin States, Precipitation, Vol. 2, September 1969.
4. U.S. Department of Housing and Urban Development, Federal Insurance Administration, "Code of Federal Regulations, Title 24, Chapter 10, Parts 1910.3A and 3B," Federal Register, Vol. 41, No. 207, revised 1976.
5. U.S. Water Resources Council, Bulletin 17B, Guidelines for Determining Flood Flow Frequency, September 1981.
6. U.S. Army Corps of Engineers, Statistical Methods in Hydrology, Sacramento, California, January 1962.
7. U.S. Army Corps of Engineers, Hydrologic Engineering Center, HEC-2 Water-Surface Profiles, Generalized Computer Program, Davis, California, September 1982.
8. Federal Emergency Management Agency, Federal Insurance Administration, Flood Insurance Study, Grant County, Oregon, published August 1978, revised May 1982.
9. U.S. Army Corps of Engineers, Walla Walla District, Topographic Mapping, Scale 1:2,400, Contour Interval 5 feet, Aerial Photography by Aerial Mapping Company, Boise, Idaho, April 1984.
10. U.S. Department of Housing and Urban Development, Federal Insurance Administration, Flood Hazard Boundary Map, Prairie City, Grant County, Oregon, Scale 1:9000, October 1974, revised July 1976.

Chow, Ven Te, Open Channel Hydraulics, McGraw-Hill Book Company, 1959.

U.S. Department of the Interior, Geological Survey, Roughness Characteristics of Natural Channels, Water-Supply Paper 1849, Government Printing Office, 1967.



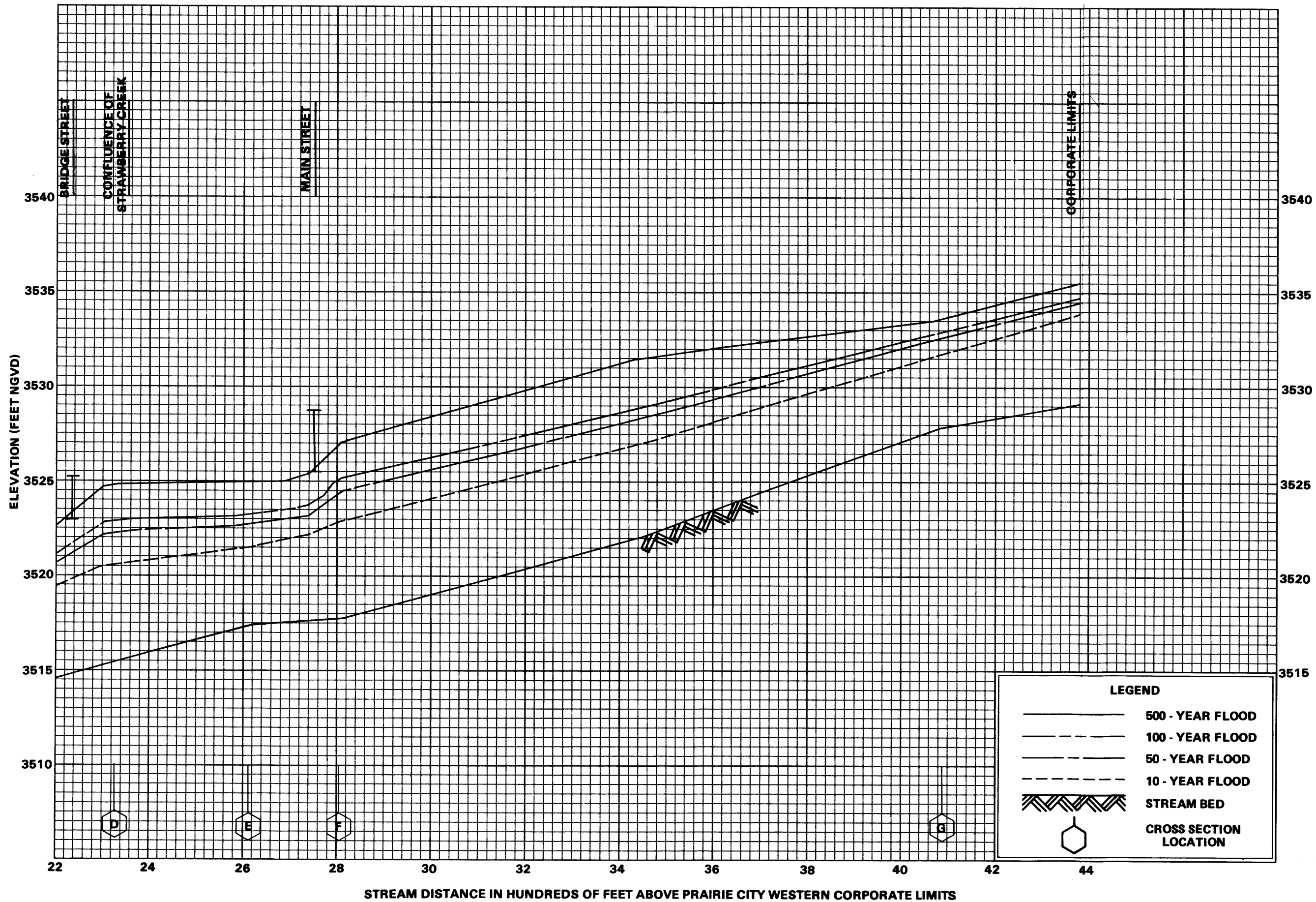
FLOOD PROFILES

JOHN DAY RIVER

FEDERAL EMERGENCY MANAGEMENT AGENCY

CITY OF PRAIRIE CITY, OR
(GRANT CO.)

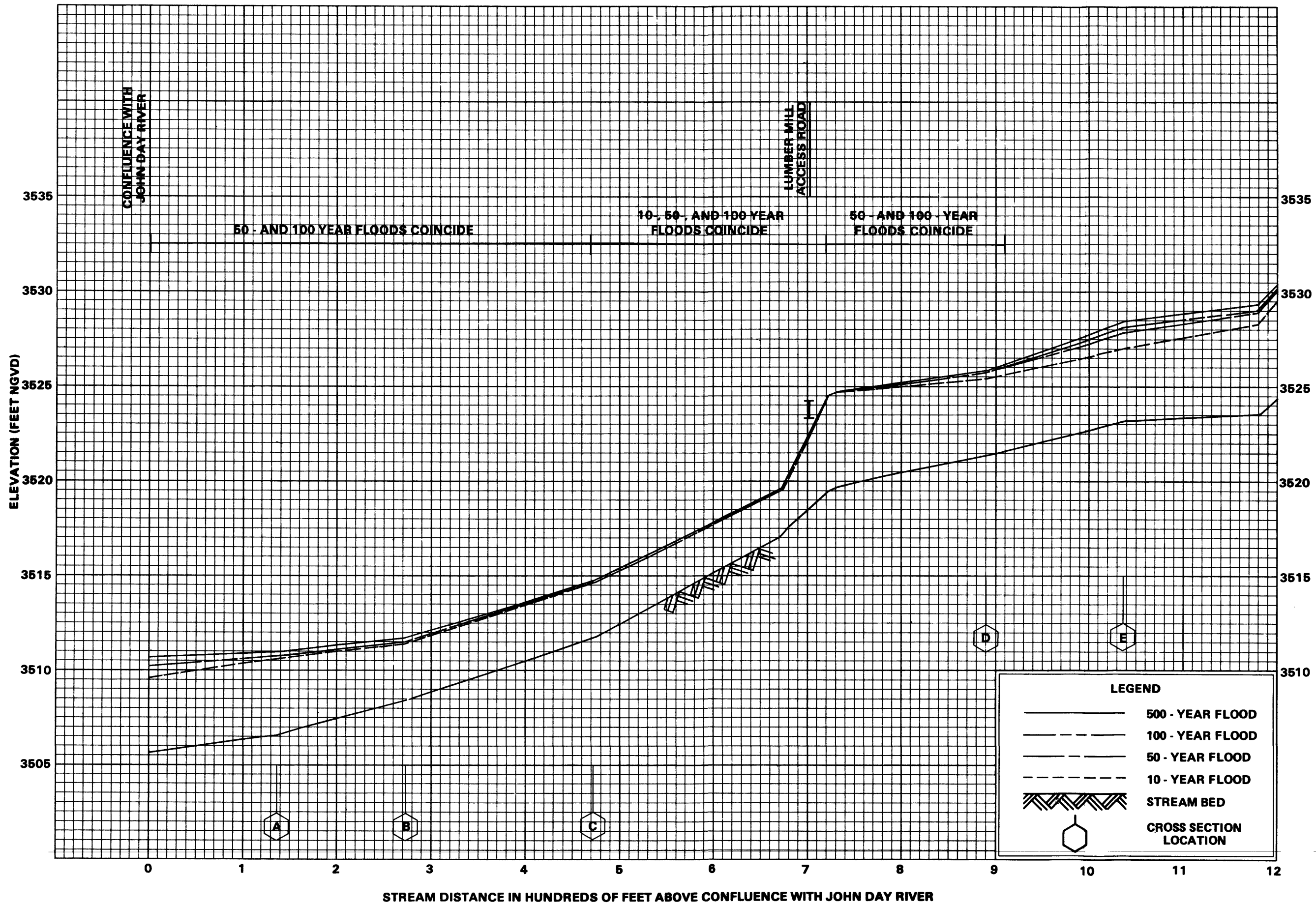
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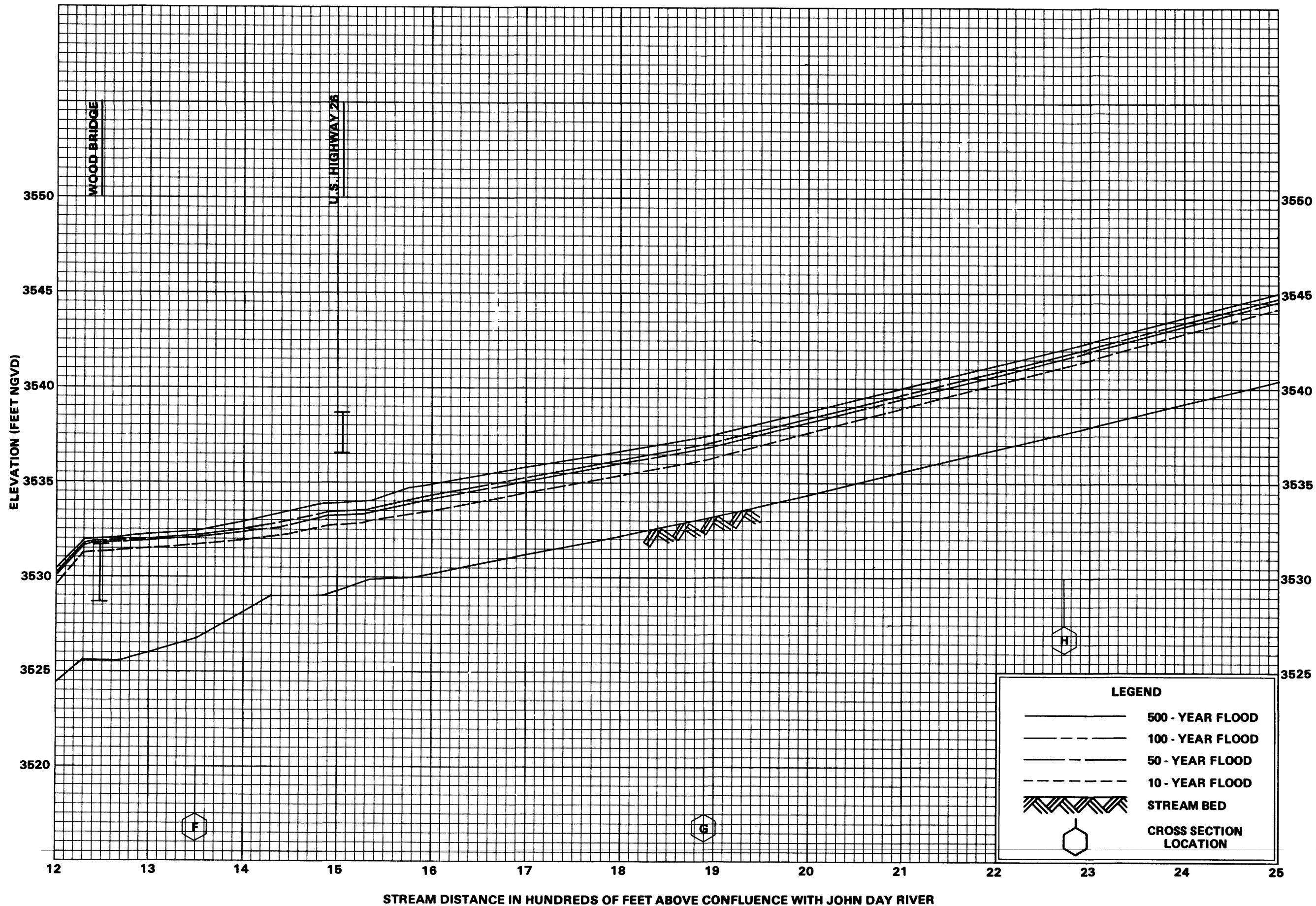


FEDERAL EMERGENCY MANAGEMENT AGENCY

CITY OF PRAIRIE CITY, OR
(GRANT CO.)

02P





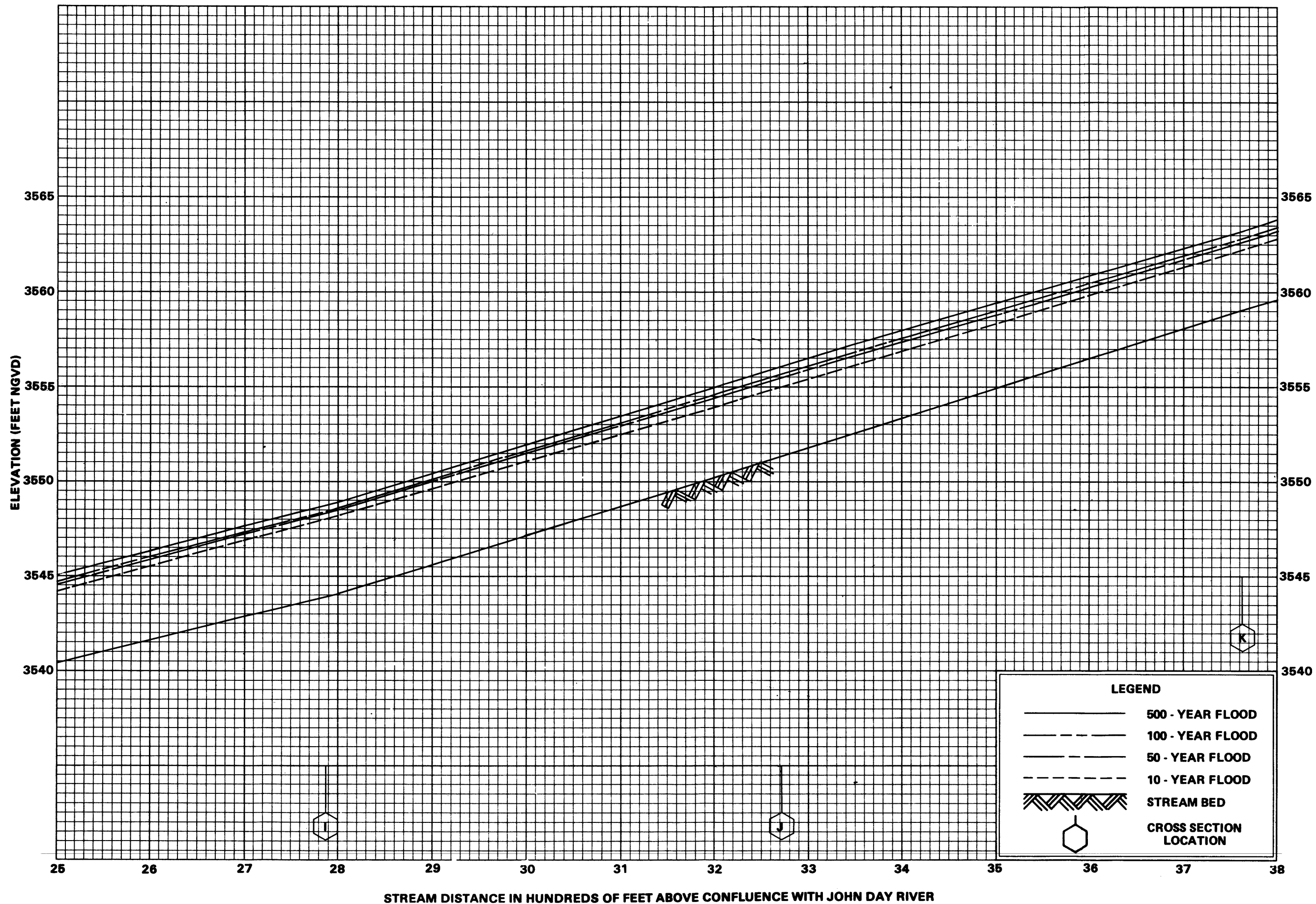
FLOOD PROFILES

DIXIE CREEK

FEDERAL EMERGENCY MANAGEMENT AGENCY

CITY OF PRAIRIE CITY, OR
(GRANT CO.)

04P



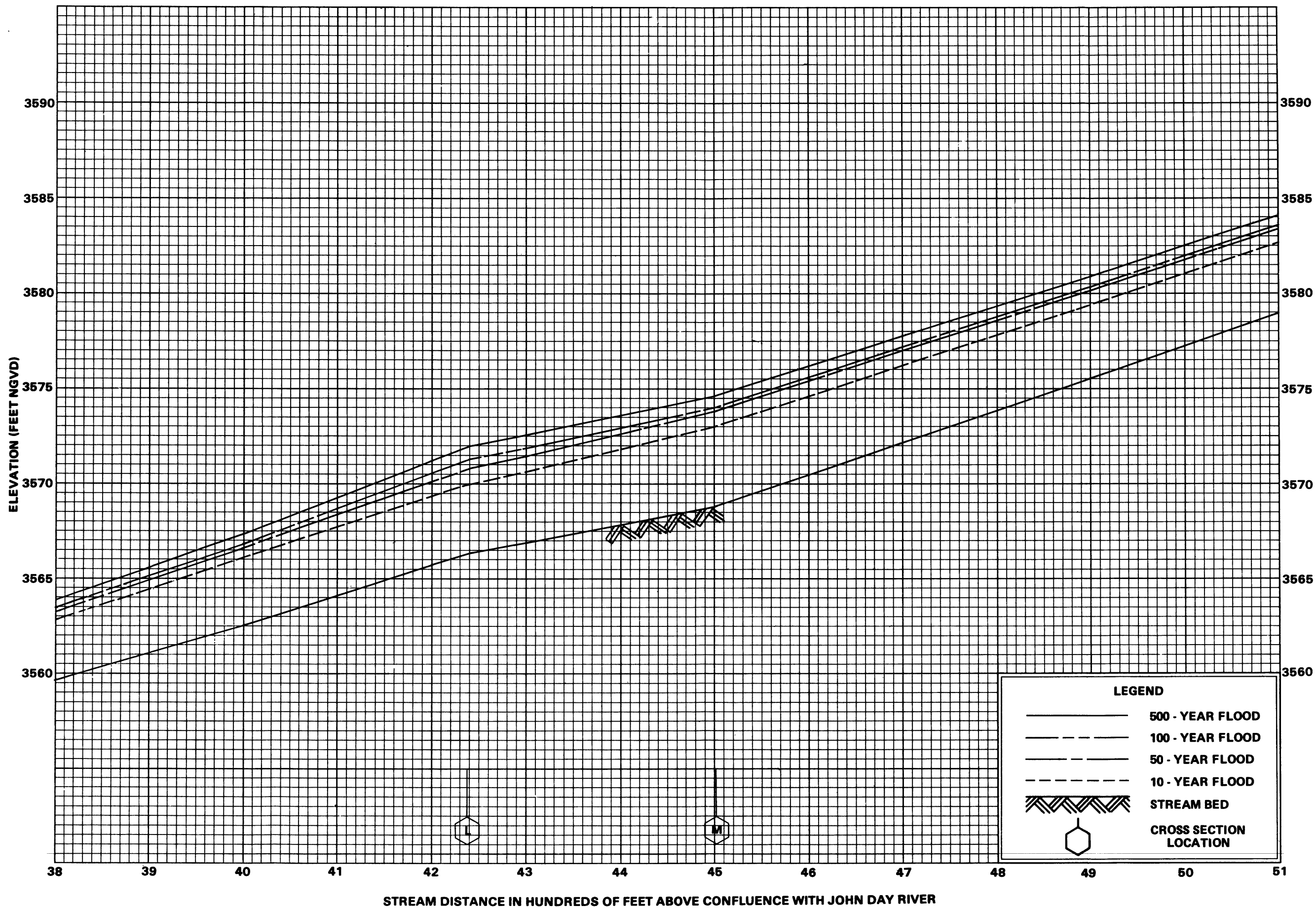
FLOOD PROFILES

DIXIE CREEK

FEDERAL EMERGENCY MANAGEMENT AGENCY

CITY OF PRAIRIE CITY, OR
(GRANT CO.)

05P



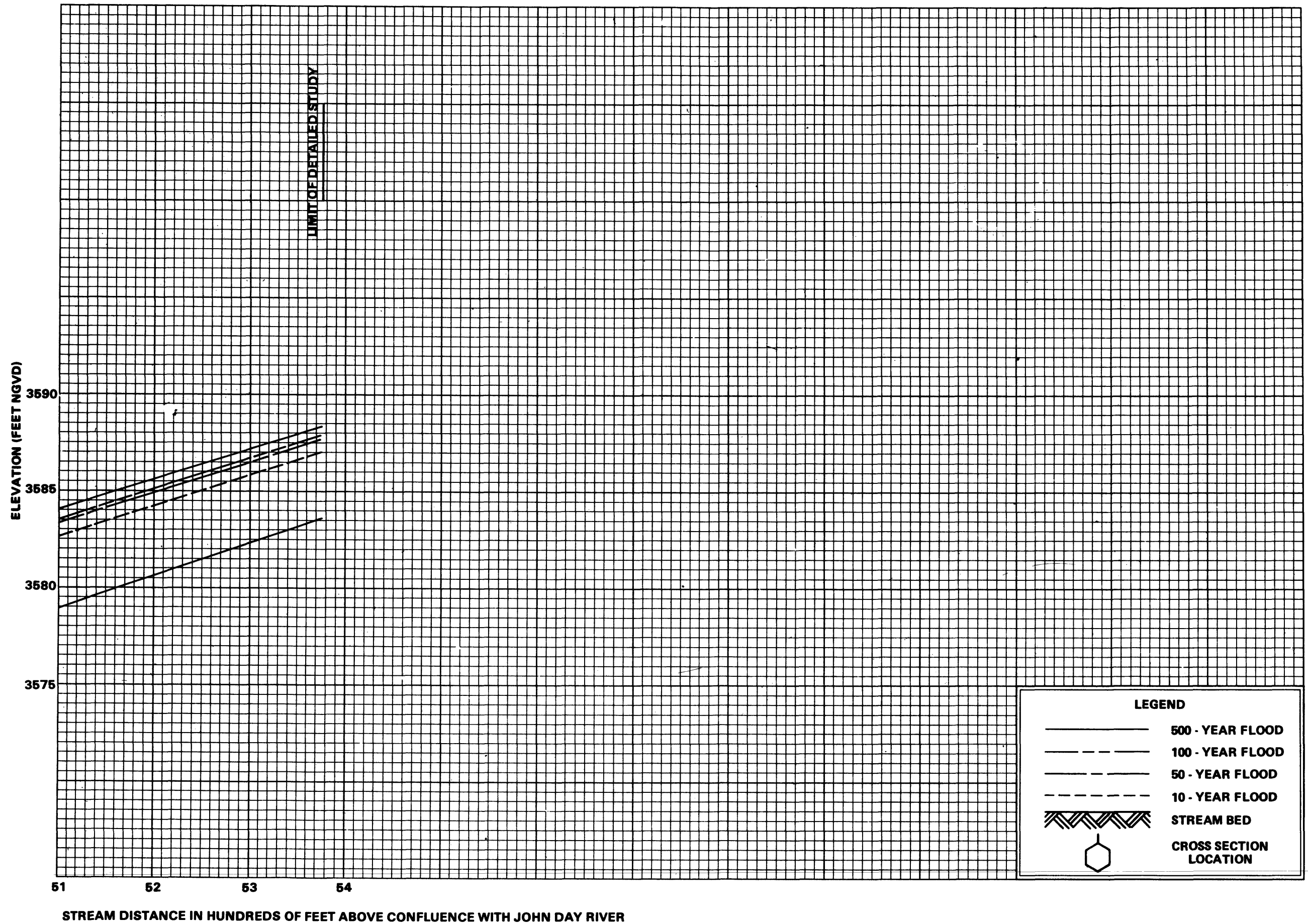
FLOOD PROFILES

DIXIE CREEK

FEDERAL EMERGENCY MANAGEMENT AGENCY

CITY OF PRAIRIE CITY, OR
(GRANT CO.)

06P



FLOOD PROFILES

DIXIE CREEK

FEDERAL EMERGENCY MANAGEMENT AGENCY

CITY OF PRAIRIE CITY, OR
(GRANT CO.)

07P

EXHIBIT 3 - ELEVATION REFERENCE MARKS
CITY OF PRAIRIE CITY, GRANT COUNTY, OREGON

<u>Reference Mark</u>	<u>Elevation (feet NGVD)</u>	<u>Description of Location</u>
RM 1	3538.48	At Prairie City 50 feet south of center of Front Street (US Highway 26) and 27 feet east of the center of Kilborne Street set vertically in the north face of the wall of the post office, 10 inches from the northwest corner of the building and in the second stone above the sidewalk. USGS standard disk stamped "3538.818 X34 1939."
RM 2	3540.13	Near the western corporate limits of Prairie City, 200 feet southwest of Mile Post No. 175 of U.S. Route 26 in the east end of the sidewalk of the concrete bridge over Dixie Creek, 50 feet west of the center of a side road south, 20 feet southeast of the center of the highway and 3 feet southwest of the south corner of the bridge. Oregon State Highway Department disk stamped "3540.5 S194 1941."
RM 3	3534.38	A screw and washer set in the center of the intersection of Bridge Street and Overholt Avenue.